Terra Project Science Outreach Overview



Main foci:

- Executive Committee for Science Outreach (ECSO)
- EOS Rapid Response Network
 - Terra's first light
- Earth Observatory
 - Other web sites

Other activities:

- Visualizations database*
- museums
- TV & radio documentaries
- Journal & magazine articles
- posters & brochures

Executive Committee for Science Outreach (ECSO)

- V. Ramanathan, chair
- Mark Abbott, IDS rep
- Mike Abrams, ASTER
- John Gille, MOPITT
- Jim Hansen, IDS rep

- Ralph Kahn, MISR
- Yoram Kaufman, MODIS
- Michael King, ex officio
- Steve Running, IDS rep
- Bruce Wielicki, CERES
- Each member has 5 EOS PIs with whom they network, ~ 45 total
- Objective is to meet monthly via telecon to discuss new science results & identify those that are "mature" for press release
- As needed, Terra Project Science Office will assign writer &/or data visualizer to help produce press release materials
- End products forwarded to NASA PAO and PI's agency or school for joint release

EOS Rapid Response Network



- Headed by Jim Collatz, Terra Asst. Project Scientist
 - (301) 614-6651, or jcollatz@biome.gsfc.nasa.gov
 - Goal is to foster 24-hour to weeks (as needed) turnaround of Landsat 7 & Terra imagery over significant Earth events
 - As a general rule, each should feature images from at least two instruments to show synergy
 - Key points of contact are (please confirm):
 - Bob Evans, MOCEAN
 - Bill Ridgway, Atmosphere
 - Eric Vermote, MODLAND
 - Mike Abrams, ASTER
 - Mike Teague, SDST

- Dave Diner, MISR
- John Gille, MOPITT
- Bruce Barkstrom, CERES
- RJ Thompson, Landsat 7
- Steve Kempler, GDAAC

EOS Rapid Response Network (cont.)

- Verbal agreement to share info with USGS Center for Integration of Natural Disaster Information (CINDI)
- Terra Project Science Office will couple data visualizer(s) with instrument contacts to produce imagery for public media
 - Must also solicit science teams' guidance writing captions to accompany all materials
- Final products pushed to NASA PAO for publication
 - Will also publish materials on Earth Observatory
- Testing Rapid Response Network before launch
 - The Learning Channel documentary on fire, airs later this summer
 - D. Hall's request for L7 data to assess glacier changes

Terra First Light & Early Science

- Planning joint press conference at NASA HQ to show images from each instrument 40-50 days after launch
 - Terra-wide strategy statement forthcoming from Y. Kaufman
- Request teleconference w/ each instrument PI & Disc. Leaders to discuss first images
 - Request afternoon of either May 21, 24, or 25
- Each instrument/discipline PI to collect ideas& come prepared to present & discuss in 1- to 2-hour telecon
 - Terra Visualizations Team will begin gathering "before" images based on those selected as top priority

Terra First Light & Early Science (cont.)



Some possibilities:

- Images over greater D.C.-Chesapeake Bay region
 - MODIS -> NDVI/concrete contrast & phytoplankton in Chesapeake
 - MOPITT -> carbon monoxide in D.C. metro region
 - ASTER -> hi-res & stereovision images
 - MISR -> 3-D cloud structures over region
 - CERES -> radiative flux measurements
- Images over areas of biomass burning in S. America, Africa, or Pacific Northwest
- Images over glaciers -> analysis of change, comparison w/ "before"
- Desert regions -> analysis of change, comparison w/ "before"
- Aral Sea -> analysis of change, comparison w/ "before"
- Other ideas …?

Earth Observatory



- Site unveiled April 29 (last Thursday)
 - http://earthobservatory.nasa.gov
 - Uses a room metaphor for navigational ease & conceptual way to group information types
 - Core team's initial focus on Landsat 7, Terra, & EOS PM-1
- More than 9K hits so far
 - Science magazine planning to promote
 - Popular Science gave positive feedback
 - Yahoo selected as "pick of the day"
- Serves EOS community; needs PI involvement
 - Review data set descriptions in Observation Deck
 - Submit articles &/or article ideas
 - Notify us of papers submitted, field campaigns forthcoming

Other Outreach Activities

- Partnerships with Smithsonian & American Museum Natural History
 - Standing order for all our data visualizations & animations
- Two documentaries on The Learning Channel—"fire" & "ice"
- Articles in popular magazines (e.g., Scientific American, National Forum)
- Terra general public brochure and Terra poster forthcoming
- Terra web site
 - http://terra.nasa.gov
- Global Fire Monitoring web site
 - http://modarch.gsfc.nasa.gov/fire_atlas
 - Cited by USGCRP as one of 12 key accomplishments in 1998
 - More than 300K hits worldwide

Summary of Requests for MODIS PI Support

- Review Earth Observatory global dataset holdings & product descriptions
- Proactive notification of significant new science results
 - Notify us upon submission for publication
 - Will prepare press release upon acceptance for publication
- Proactive notification of forthcoming field campaigns (6 months prior, if possible)
 - Will survey community to track info in EOb Newsroom
- Submit articles (or supervise grad students) for publication in Study
- Discipline POCs be ready & responsive when called upon by Rapid Response Network
 - Each discipline should have delegate for gathering/processing data

Promotion of Field Campaigns

- Will coordinate through Steve Cole & EOb Newsroom notify press
- Approach AMNH to conduct live electronic field trips
- Approach "Pulse of the Planet" and "Earth & Sky" to do NPR radio segments
- Do near-real-time updates in the Earth Observatory while campaign is ongoing
- Make contacts w/ The Learning Channel (via Cronkite Ward Productions) to do a documentary on the activities—could be "What does it take to initialize a major satellite mission?"
 - Could include MOCE, SCAR99, & Bigfoot components